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Problem Solving Sociology: Learning Creative Problem Solving in an Undergraduate Sociology Seminar

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Editor's Introduction

The following article was written by students in a course entitled “Problem Solving Sociology” given by Dr. Robert Bendiksen at the University of Wisconsin—LaCrosse. The course introduction points out that

Problem solving sociology has deep roots, going back to the early decades of this century. Applied sociologists have been putting their research skills to work exploring problems, doing social policy analysis, assessing the need for social programs or business opportunities, evaluating existing programs, and conducting social impact assessments. Clinical sociologists, on the other hand, are involved in a variety of sociological interventions at not only the microlevel of individual and group counseling, but also the macrolevel of organizational development and social change. Still other sociologists have been involved in basic research and theory construction, including many of your own sociology faculty. The text by Straus, *Using Sociology*, overviews the main sociological areas where you might put sociology to work in constructive social interventions.

Problem Solving Sociology is a “hands on” course in that problem-solving skills are practiced in student “focus groups.” A problem-solving frame is used to (1) identify an existing situation

as carefully as possible, (2) specify in what ways the situation might be improved, and (3) outline a plan of action that would change the situation without excessively disrupting the environment. You will be asked to be resourceful and creative, as well as analytical and evaluative, throughout the problem-solving process. Your instructor will present the problem-solving framework and you will work on a small group project in addressing a social problem of interest to you and your focus group colleagues.

Introduction

Everyday life is filled with problems that can be found in society on personal, family, business, government, or world levels. In dealing with these problems, solutions are sought to address particular situations. Careful analysis and creative thinking allows for accurate and innovative responses to be made when focus groups practice sociological intervention.

Creative problem-solving techniques are essential skills for problem solvers to analyze situations or conditions perceived to be problems. A problem-solving framework is used to (1) identify an existing situation as carefully as possible; (2) specify in what ways the situation might be improved; and (3) outline a plan of action that would change the situation (Bendiksen, 1988).

After a solution has been chosen and plans to implement it have been made, criteria must be set to evaluate the performance of the implementation process and the impact of the intended solution.

Effective problem solving relies on creativity as well as critical thinking. Creativity entails development of meaningful new ideas, which is accomplished by taking various theoretical perspectives in a search for possibilities (e.g., utilizing insights from functionalist, symbolic interaction, and conflict theories). Critical thinking requires problem solvers to be analytical and evaluative in comparing and contrasting ideas. Critical thinking is used to improve and refine the promising alternatives that lead to effective decisions and sound foundations for effective action.

The following problem-solving frame was learned and practiced in a seminar on "Problem Solving Sociology" at the University of Wisconsin—La-Crosse, Spring 1988. The social constructionist approach to social problems, as presented by Spector and Kitsuse (1985), provided the theoretical framework for the seminar. Sociological practitioners from the university and the community described their clinical sociology interventions in guest presentations on topics assigned in Straus (1985). The second half of the semester consisted of a structured focus-group creative problem-solving activity. The remainder of this paper describes each of the six steps of creative problem solving and illustrates the process with an example generated in a focus group project.

Creative Problem Solving: The Isaksen-Treffinger Model (Isaksen and Treffinger, 1985)

The problem-solving frame is a six-step model that includes: mess finding, data finding, problem finding, idea finding, solution finding, and acceptance finding. Each step utilizes divergent and convergent norms that include (Isaksen and Treffinger, 1985:2-4):

Divergent Norms

- defer judgment
- generate many ideas
- accept all ideas
- "stretch" for ideas
- allow ideas to simmer
- observe combinations

Convergent Norms

- be deliberate
- be explicit
- avoid premature closure
- examine difficult issues
- use affirmative judgment
- focus on the objectives

In order to solve a problem, a problem-solving group must first "find what is out there" (i.e., divergent thinking). Consequent decisions (i.e., convergent thinking) are based on what has been previously discovered or developed. Brainstorming is the technique most often used to stimulate divergent thinking. The most important aspect of brainstorming is the quantity of ideas generated by comparing, contrasting, and adapting possibilities. Above all, problem solvers should avoid groupthink, a premature concurrence, leading to illusions and misperceptions.

Stage I. Mess Finding

Claims made by members of society reflect social attitudes. The nature of these claims can be analyzed to determine patterns or areas of interest. The areas of interest can be formed into mess-finding statements. The statements can then be examined for a general theme and converted to a final statement. A set of criteria is then used to discuss the topic in more detail.

Divergent Phase In an attempt to find an area of interest to the problem-solving group, mess-finding techniques suggested by Isaksen and Treffinger were utilized. Experiences and situations were observed for messes keeping an open mind to new opportunities. A mess-finding matrix was used and included the invitational stems, "Wouldn't It Be Nice If . . . ?" (WIBNI) and "Wouldn't It Be Awful If . . . ?" (WIBAI) These two plus a neutral condition were matched against a question matrix in the following form Isaksen and Treffinger (1985:3-7, 8).

	<i>WIBNI</i>	<i>Neutral</i>	<i>WIBAI</i>
Who?	students, children, patients, drivers	pedestrians, courts	administration, opponents
What?	funding, research, goal, cure, education	apathy, ignorance	misinformation, inhibition
When?	immediately, schedule	during	postponement, late
Where?	La Crosse, community	Wisconsin, home	other countries, troublespot
Why?	personal interests, values, beliefs	norms, traditions, status quo	mandatory, poor effort
How?	cooperation, honesty, eagerly	middle of the road	competition, disinterest, reluctance

The items in the second, third, and fourth columns indicate what the problem-solving team came up with. This information was next mixed and matched using more invitational stems to reveal at least twenty-five (a large arbitrary number) general mess-finding statements.

Guidelines for the mess-finding statements:

- (a) Keep the statements broad
- (b) Keep the statements brief
- (c) Keep the statements positive/beneficial (Isaksen and Treffinger, 1985:3–8).

Possible stems for the mess-finding statements:

- (a) If I had my way . . .
- (b) Why don't we . . .
- (c) It would be nice/helpful if . . .
- (d) If it were up to me . . . (Isaksen and Treffinger, 1985:3–9).

The following are ten examples of the mess-finding statements the problem-solving team devised by mixing and matching the information from the previous matrix.

1. If I had my way scientists would find a solution to the ozone layer problem before it's too late.
2. If I had my way research would be implemented near the poles to determine the actual cause of ozone decay as it would be beneficial to all life on earth.
3. It would be nice if global cooperation was obtained in finding solutions to world hunger such as teaching agricultural processes.
4. If it were up to me food surpluses would be distributed to needy countries and needy people right away.
5. It would be nice if the South African government would allow the opposing factions to more effectively voice their opinions before racial tensions destroy the economy.
6. If I had my way the homeless would be housed and some kind of public health care program implemented.
7. If I had my way people would be more educated about nuclear energy so they wouldn't automatically object to it.
8. If I had my way other countries would publicly acknowledge drug and alcohol problems so that global cooperation could help find a solution.
9. It would be nice if the divorce rate would decline as it affects more than just the two married people but also the children, friends, workplace, etc.
10. If I had my way there would be counseling for people planning to marry to let them know exactly what kind of commitment they're making.

Convergent Phase In this phase a search for a common theme or thread among mess statements takes place. The general theme is then converted to a mess statement. Once the general challenge is accepted, efforts to respond to it take place. After the general statement has been evaluated, the next step in the problem-solving process, Data Finding, will be implemented.

Another mess-finding matrix was used to help generate different challenges and situations on which to base a final mess statement (Isaksen and Treffinger, 1985:3-10).

The answers to the questions in the following matrix were based on the previous mess-finding statements to help converge on an overall general mess-finding statement. The following mess-finding statement was derived by the group from the new information.

It would be nice if we could increase social awareness of a particular condition so that questions addressing that condition could be handled more effectively.

To gain more focus on the problem-solving technique the group has chosen AIDS, Acquired Immune Deficiency Syndrome, as a topic to investigate. The

PERSONAL ORIENTATION		
		Weaknesses
SITUATIONAL OUTLOOK	Strength	
	What opportunities do I want to consider? What do I hope to accomplish? <i>general education, knowledge base</i>	What opportunities are difficult to work on (personal limitation)? <i>national exposure</i>
	Outcomes	
	What personal strengths do I want to improve on? <i>personal knowledge base communication skills</i>	What weaknesses do I want to improve? <i>knowledge base limited funds</i>
	What are some obstacles to deal with? What is preventing me from doing what I want? <i>personal fears inhibitions</i>	What limitations, or lack of resources do I want to improve or work on? <i>public awareness</i>
	Obstacles	
	What personal strengths do I want to use to deal with these concerns? <i>eagerness, motivation</i>	

adoption of a specific topic will allow the team to effectively collect data in the next phase. Before the data search takes place, the general statement must be evaluated.

Ownership and outlook criteria were used to discuss and review the statement. Ownership includes influence over the situation, interest in the condition, and imagination/creative thinking. Outlook criteria include familiarity, critical nature or importance, immediacy of the action needed, and the direction the situation will take. The following is a summary of the mess statement using the ownership and outlook criteria.

I. Ownership

A. Influence

- Yes, any individual can increase the social awareness of another.

B. Interest

- Yes, personal interest and concern provides motivation to create awareness.

C. Imagination

- The statement implies a need for imagination to create awareness.

II. Outlook

A. Familiarity

- Awareness and understanding of the subject is the goal.

B. Critical Nature

- The nature of the topic is important in that the question cannot be correctly addressed without a basic awareness.

C. Immediacy

- Immediately

D. Direction

- Increasing social awareness will favor more positive results. The continued lack of awareness will lead to a general population with a poor interest in its society (Isaksen and Treffinger, 1985; 3–12,13).

Stage II. Data Finding

This phase can be categorized into three areas: (1) the data search needs to be planned; (2) the search is implemented; and (3) the data can be compiled for further analysis.

Divergent Phase The data search allows key pieces of information to be uncovered. Information gained will help determine priorities and sort out what we actually know from what we don't. There are a number of ways to go about collecting data. These include reading, research, and interviews. Also, there are two types of data that will be observed: objective and subjective. It is important to distinguish between the two in that objective data are the "hard" facts and subjective data are the claims-making activities. Objective data include: concepts, theories, studies, and quantitative data. Subjective data include: opinions, personal experiences, viewpoints, and qualitative data.

With a topic chosen the group had to perform a simple modification on the mess statement so the data search would be more focused.

It would be nice if we could increase social awareness of AIDS so that questions addressing the disease could be handled more effectively.

Plans to implement the search are necessary so that specific resource material is not duplicated by the group members. It also allows a greater amount of material to be covered.

The problem-solving team chose to use both a media and library search. Time period and resource material guidelines were set and distributed to prevent overlap and enhance the quantity of material covered. Other additional research was also suggested such as interviews or attending seminars. The type of information the group looked for included impressions, observations, questions, and feelings. The question matrix (who, what, when, where, why, how) was also very useful in the data search.

Sample of the data collected:

- 50,000 people have the fully developed AIDS virus
- 1.5 to 3 million are in the latency stage which can last for 8 to 10 years
- of the 1.5 to 3 million, 90% will fully develop AIDS, the rest will remain carriers
- the number of people who fully develop AIDS doubles every 10 months (Sheils, 1988)
- fear of working with AIDS patients
- AIDS patients have a right to health care
- low risk of transmission in working with AIDS patients (Keller, 1988)
- need to increase federal funding to fight the disease (AIDS) concentrating on research, education, and treatment
- development of a new test that is virtually 100% accurate in detecting the AIDS virus
- most rapid spread of AIDS is among intravenous drug users and their sexual partners
- controversial area of mandatory AIDS testing (*Christian Science Monitor*, February 26, 1988)
- claims about the spread of AIDS among heterosexuals in publicized study declared unproven and irresponsible by the Surgeon General (*Christian Science Monitor*, March 10, 1988)
- responsibility of the world community to institute effective education and social and medical programs to help diminish the likelihood of spreading the ailment
- many of the world's afflicted nations are moving rapidly to develop AIDS policies
- the cure to stopping the spread (without medicine or a vaccine) is education to change sexual practices and health steps to end the spread of the disease through blood transfusions (Hey, April 20, 1988)
- growing incidence of AIDS virus among teenage Americans
- "How quickly can convincing information on the findings be distributed to those who work with teens?"
- " . . . will teens, many of whom ignore warnings about the ways that

AIDS is spread, then change their personal practices?" (Hey, May 2, 1988)

Convergent Phase In this phase of data finding the most important data are identified and analyzed. Common dimensions or themes are found which will represent major areas to investigate. The last part of the convergent phase will be a summary of the essential elements discovered.

The problem-solving group used the following data finding matrix (Isaksen and Treffinger, 1985:4-24)

Data "Hot Spots"		
Know	Need to Know	Like to Know
AIDS cases are increasing	what kinds of AIDS policies	why some people ignore warnings
more awareness of AIDS	how to increase funding	what causes indifference
fear of AIDS	how to better educate	
Common Themes		Areas to Investigate
growing awareness		social impact
changes needed apathy		motivational techniques
Summary of the Essential Elements		
Social impact, a significant increase in awareness, will hopefully lead to effective policy making and individual social consciousness, if properly motivated.		

Stage III. Problem Finding

Building on information from the two previous stages, the components of a problem statement can be revealed. The problem will need to be analyzed from different points of view. Once the problem has been examined a final problem statement can be developed.

Divergent Phase There are four components in creating a problem statement (Isaksen and Treffinger, 1985:5-3):

1. Invitational Stem
 - In what ways might . . .
 - How might . . . (to create a sense of possibility)
2. Owner
 - individual or group with vested interest
3. Action Verb
4. Goal or Area of Concern

By generating lists of possible owners and action verbs, multiple problem statements can be created. Owners and action verbs are mixed and matched for each problem statement beginning with an invitational stem and including a goal or area of concern.

The following are examples of the group's owner and action lists as well as examples of the possible problem statements.

<i>Owners</i>	<i>Action Verbs</i>
society	deal/handle
hospitals	comfort
AIDS victims	form policy
government	prevent
medical staff	provide funding

Possible Problem Statements:

- How might society handle the AIDS situation better in order to educate better and spare unnecessary panic?
- In what ways might the government form policies dealing with mandatory AIDS testing in order to prevent or slow down the spread of the disease?
- How might hospitals comfort the AIDS victims and their families more in order to lessen the pain of the disease and the impending death?
- In what ways might government provide funding to find a cure or deterrence for the disease in order to save lives?
- How might the medical community convince the government to form specific AIDS policies so that education, research, and treatments can be conducted effectively?

Convergent Phase A working problem statement is developed through examination of the previous possible statements. The working problem statement is based more upon levels of abstraction of the possible statements rather than the statements themselves. This makes for a more general working statement as opposed to a specific one.

Group discussion led to a problem statement. However, continued discussions led the statement to be revised several times. Revision was necessary to eliminate vague ideas and provide a better sense of direction for the problem statement.

- How might institutions influence society in an effort to achieve a desired status or goal (to the condition)?
- How might institutional claims makers (e.g., lobbyists, editorialists, and heads of government agencies) increase the interest and active involvement of the general public toward public policy?
- How might claims makers (e.g. lobbyists, editorialists, and public figures) increase the interest and active involvement of the general public?

Applying this open-ended statement to the topic AIDS, the statement *might* read:

How might claims makers (e.g. lobbyists, editorialists, and public figures) increase the interest and active involvement of the general public toward the prevention of the spread of AIDS?

The problem statement concerns the interest and active involvement of the general public as opposed to a specific condition of the AIDS issue.

Stage IV. Idea Finding

To generate many possibilities brainstorming is used. Achieving uninhibited responses to requests for ideas can result in an array of possibilities. Research can then be used to determine possible practical solutions.

Divergent Phase To find the most promising ideas that respond to the problem statement, a list of many possibilities and alternatives must be generated. Ideas in use that work, that don't work, or are common practice are examined.

For the problem-solving team, brainstorming proved to be very effective in generating a list of "unfinished" ideas. These are "unfinished" ideas in that they have not been provided with any direction or specific goal.

- interviews
- submitting and soliciting editorials
- interest groups
- public administration students
- internships
- constituent response
- government funding
- causes and consequences
- picketing
- group member network
- mass media
- politicians with a special interest
- seminars
- questionnaires
- social policy class assignments
- political favors
- social impact studies
- leaders of groups
- special interest/target media
- private funding

To provide direction for the “unfinished” ideas the following guideline was used to generate possible ideas with a specific goal or direction. The ultimate goal being the increase in interest and active involvement of the general public (Isaksen and Treffinger, 1985:6–13).

Substitute	– verb, subject, object
Combine	– elements already put down
Adapt	– idea to a new situation
Modify	– magnify, minify
Put	– to a different use
Eliminate	– parts or pieces
Reverse	– sequence

Convergent Phase Focus is now on selecting the most promising ideas. Another data search is implemented to determine which ideas are actually utilized and are seemingly effective.

Through observation of what was “out there,” the group came up with seven idea possibilities.

1. Setting an example
 - i.e., Greenpeace, Ghandi, Martin Luther King, Jr.
2. Use of prominent personalities (fundraising)
3. Use of prime time (TV)
 - i.e., reaching a great number of people
4. Editorials and opposing positions
5. Organized protest/petition
6. Continued research
7. Rights as voters

Group discussion allowed the seven ideas to be converted into four main ideas for solving the problem statement. As a reminder, the goal is to increase the interest and active involvement of the general public.

1. Setting an example
2. Exposure through the media
3. Individual and small group actions/activities,
 - e.g., editorials, protests, petitions, letters to legislators
4. Education through well-circulated research findings

These four possible solutions can be applied to the AIDS problem statement:

How might claims makers (e.g. lobbyists, editorialists, and public figures) increase the interest and active involvement of the general public toward the prevention and spread of AIDS?

1. Setting an example
 - prominent public figures who openly advocate safe sex
2. Exposure through the media
 - T.V., radio, newspaper, magazine reports and articles about the tragedy of AIDS
3. Individual and small group actions/activities
 - editorials, protests, petitions, and letters to legislators to express their viewpoints and concerns about AIDS
4. Education through well-circulated research findings
 - widely and well distributed information so it can be used to create a better understanding of AIDS

Stage V. Solution Finding

Four possible practical solutions have been identified and are now examined. Criteria for evaluation are developed first. Based on the criteria, a final practical solution can be formulated.

Divergent Phase To select a viable solution, the most promising ideas must be evaluated. This is done by formulating possible criteria so that the ideas can be effectively compared. Criteria formulation is based on how the solution options (four main ideas) will be evaluated for effectiveness. For example; factors of cost, reliability, potential, simplicity, effectiveness, acceptability, resources, etc. can be developed into workable criteria for evaluation purposes.

Through examination and discussion of the various factors of possible criteria, five important criteria statements were formulated by the problem-solving group.

1. Is the solution option a relatively new idea or improvement over what is presently done.
2. Is the solution option permanent/long-lasting rather than a short-term coverup.
3. Does the solution option move things in the direction of the goal.
4. Is the solution option easily understandable and does it create a favorable impression.
5. How important are the non-human resources (money) to the solution option.

Convergent Phase The selected criteria are now used to actually evaluate the most promising ideas (solution options). The solution options are evaluated against each criteria. The options are then compared against one another in relation to how they rated on the criteria evaluation. This will result in one of the options reigning above the others as the best solution. If a “tie” for the best solution occurs, reevaluation of the solution options against each other is needed. If this does not result in a single best solution, the evaluating criteria will need to be redefined.

The following solution finding matrix, used by the problem-solving team, will help illustrate the process of determining the best solution. The letters (A) through (E) of the “Important Criteria” correspond to the five important criteria statements listed in the previous phase. The numbers (1) through (4) of the “Solution Options” correspond to the four main ideas for solving the problem (Isaksen and Treffinger, 1985:7–16).

		Important Criteria						
		A	B	C	D	E		
Solutions options	weight	weight	weight	weight	weight		Total	Rank
	.5	2.0	1.5	1.0	.75			
1	1	0	1.5	3	.75	6.25	4	
2	1.5	4	3	3	1.5	13	2	
3	1.5	4	4.5	3	.75	13.75	1	
4	1.5	4	1.5	2	2.25	11.25	3	

Rating Scores:

3 = excellent

2 = adequate

1 = poor

0 = not applicable

The criteria are weighted against each other so that "(D)" is twice as important as (A), (C) is three times as important as (A), and so on. Each solution option is rated from 0 to 3 against each criteria. The rating score a solution receives is multiplied by the weight of the evaluated criteria and the product is placed in the corresponding box.

For example, solution option (2) is evaluated against criteria (A) and rated at a score of 3. The "3" is multiplied by the weight of ".5" resulting in a product of "1.5" which is placed in the corresponding box.

After criteria evaluation of each of the solution options is completed, totals are taken across and ranked from highest to lowest. The solution option with the highest score is the best. For the problem-solving group, the best solution was individual and small-group actions and activities (editorials, petitions, protests, letters to legislators).

In response to the AIDS related problem statement: *How might claims makers (e.g. lobbyists, editorialists, and public figures) increase the interest and active involvement of the general public toward the prevention and spread of AIDS?* The group replied with the following practical solution: *by Encouraging and assisting individual and small group actions/activities that initiate the interest and active involvement of the general public.*

Stage VI. Acceptance Finding

The purpose of this stage serves to evaluate the overall results of the problem-solving process. After plans to implement the solution have been made, areas of assistance and resistance are identified. The resultant information will aid the effect of the final implementation process. Final evaluation of the solution effects will serve as feedback to the problem-solving group. Needed adjustments can then be made as necessary.

Divergent Phase Plans to implement the solution are now developed. The question matrix can be applied to assist in the development of a plan of action.

The problem-solving group had previously identified four actions/activities that could be used to implement the solution. The group applied the question matrix to find out just how individuals and small groups could become involved in the following four actions/activities. The practical solution is restated first.

Practical Solution: *Encouraging and assisting individual and small group actions/activities that initiate the interest and active involvement of the general public.*

Actions/Activities to be encouraged and assisted:

1. Editorials

Who? ● Newspaper and magazine editors

What? ● Addressing the prevention and spread of AIDS

- When? • When the the editor thinks that encouraging actions will benefit the community
- Where? • On the editorial page(s) of newspapers and magazines
- Why? • To prevent the spread of AIDS
- How? • By writing letters to the editors

2. Petitions

- Who? • Concerned members of the public and special interest groups
- What? • Employee safety standards, mandatory educational programs
- When? • After some public concern has been generated by the editorials
- Where? • In the local community, possibly statewide
- Why? • To arouse and create group support
- How? • Take the petitions to the local government officials or on the more formal level have it drafted by a lawyer and present it to the state legislators through lobbyists

3. Protests (marches, picketing, sit-ins)

- Who? • special interest groups
- What? • lack of funds for AIDS research, better sex education programs in high schools
- When? • After a petition has gone through unsuccessfully
- Where? • School board meetings, state and local government buildings, maybe even federal buildings
- Why? • So government/school boards take notice that a change is wanted. Also to create support from the public
- How? • By contacting people through mailing lists (from petitions, etc.), special interest groups

4. Letters to legislators (state, federal)

- Who? • Concerned individuals, special interest groups
- What? • Budget more funds for AIDS research and prevention programs
- When? • When it is believed that a legislator needs convincing of his/her constituents' position on AIDS
- Where? • State and federal legislators, especially at the state level where the letters are most effective
- Why? • So legislators will approve more funding for AIDS programs
- How? • Individually, handwritten letters are the most effective

A plan of action was now developed from these matrixes. First is to get editors to write editorials on the prevention and spread of AIDS by writing letters to the editor. After some public concern has been generated, petitions are used to let legislators know of the public concern and attitudes. If this is unsuccessful, protests can be used to help generate more public support, creating pressure on the legislators. Finally, letters to legislators, especially individual, handwritten letters, can help convince a legislator of the constituents' attitudes and concerns. It is hoped that this plan will result in meaningful programs to prevent the spread of AIDS.

Before the plan can be implemented, areas of assistance and resistance need to be identified so that additional planning to avoid resistance and to seek assistance can be made. These areas can be identified by once again using the question matrix. The following is the question matrix developed by the problem-solving group (Isaksen and Treffinger, 1985:8-14).

	Assistance	Resistance
<i>Who?</i>	● medical profession, families and friends of AIDS victims	● uneducated people who think it doesn't affect them
<i>What?</i>	● better understanding of the disease	● naivete toward AIDS
<i>When?</i>	● AIDS cases become evident in an area	● it violates personal beliefs, values
<i>Where?</i>	● within the community, neighborhood, local media	● in areas not relatively affected by AIDS
<i>Why?</i>	● people know someone with AIDS	● repulsion of some people toward AIDS
<i>How?</i>	● convincing people AIDS is a threat to everyone	● irritating or annoying those who want nothing to do with AIDS in any way

Convergent Phase To be effective, the implementation plan needs to incorporate the areas of assistance while avoiding the areas of resistance. Also, alternatives need to be developed in case resistance is encountered.

To accomplish the objectives the group decided to direct the plan to the community level. It was decided that members of the medical community would be needed to provide validity to solution efforts. Religious leaders were also considered as a good resource to influence the public as a great many personal values and beliefs stem from a person's religious convictions.

If resistance was encountered, the group thought that at first these resistant areas should be left alone. Concentration should be on the more favorable areas.

Through this it was hoped that the resistance would dissipate as the positive actions and attitudes of others grew (setting an example).

The final area of acceptance finding is to decide on how the solution implementation and its effects should be evaluated. The assessment allows the problem-solving group to compare where they are as opposed to where they want to be.

Based on the nature of the four actions/activities of the group's solution, two types of evaluation were decided upon. Outcome evaluation was considered appropriate for editorials and letters to legislators. Process evaluation was chosen for petitions and protests.

Outcome evaluation is an end of the project assessment to compare the outcome effects with the way things were before. Editorials and letters to legislators should be assessed in this manner because both were considered by the group as straight forward techniques. Editorials are the opinions of the editors and will either convince the community that the spread of AIDS and its prevention need to be addressed or not. Letters to legislators, in the same respect, will either convince the legislator to favor AIDS-prevention programs and funding or not.

Process evaluation is a dynamic evaluation that takes place during the entire process so that the solution project can change along the way as needed. This evaluation was chosen since petitions and protests are more dynamic in nature. If petitions are not attracting enough signatures or attention from citizens, and legislators, a different target area or legislator may be needed. A new approach may even be considered. Protests that do not gain enough recognition and sympathy from the public and legislators need to be reassessed so awareness of the rampant spread of AIDS is realized.

The final plan of action should now be implemented.

Conclusion:

Creative problem solving in student focus groups utilizes sociological concepts, research methods, and small group dynamics to intervene in significant social problems. The social constructionist perspective in sociology (Spector and Kitsuse, 1985) pays attention to claims made by the public and professionals that are well matched with the creative problem-solving process.

Creative problem solving is a flexible process that may be modified as circumstances warrant. The process may involve more research and pretesting of innovative ideas. On the other hand, creative problem solving may be informal and quick as with some individual or family problems.

The key to successful problem solving stems from the use of divergent and convergent thinking. Correct use of divergence allows uninhibited expressions or thoughts to be recognized. The ideas generated can be consolidated in a larger

perspective to establish a focus on an important question and a relevant solution. It should be noted that the question matrix (i.e. who, what, when, where, why, and how) is extremely useful in more clearly defining ideas and providing better direction for further discussions.

It appears that divergent and convergent thinking are all that is necessary to solve problems. This perhaps is true. However, effective problem solving requires the use of some form of outline to guide the process. The use and form of an outline is where adaptations for specific problems take place. Whether the problem is handled individually or in a group setting, initial and ongoing assessment of the situation will determine needs for modification of the process.

The creative problem-solving focus group discovered that the divergent and convergent processes are easy to violate. There was a tendency to jump to conclusions before all possibilities were examined. Also, focus tended to drift from the topic of interest, AIDS, toward generalities. Although generalities needed to be addressed, direction toward the specific topic had to be the main focus. When solving problems remember to keep an open mind and to focus on the objectives.

In a group setting the discussion, decision, and directional aspects of the process should be arrived at through a general consensus of the group. This practice helps avoid unnecessary and detrimental conflict within the group. Use of a group facilitator or coordinator can help in maintaining focus, resolving conflict within the group, as well as providing motivation for the other members. However, a dominating influence or intimidation, must be avoided.

The basic concepts of divergent and convergent thinking, along with any needed modifications or adaptations provide a strong basis for problem solving. With this basis effective determination of target problems, their solutions, implementation plans, and assessment can be made. Even if evaluation reveals a failure or flaws the new information can be used to renew the problem-solving process and more accurately determine a solution.

REFERENCES

- Bendiksen, R
1988 Sociology 399 Problem Solving Sociology Course Outline, University of Wisconsin—LaCrosse, Spring Semester
- Christian Science Monitor*
1988 "AIDS Panel Chief Wants More Funds; Test More Accurate," February 26
1988 "Surgeon General Calls AIDS Study Irresponsible," March 10.
- Hey, R.P
1988a "Changed Behavior Would Put Brakes On AIDS in Third World," *Christian Science Monitor*, April 20

- 1988b "U.S. Army Data Shows AIDS Virus is a Growing Teenage Problem," *Christian Science Monitor*, May 2.
- Isaksen, S. G. and D. J. Treffinger
- 1985 *Creative Problem Solving: The Basic Course*. Buffalo: Bearly Limited
- Keller, A. S.
- 1988 "Reflections on Hypocrites in a Plague Year," *Discover* (May):26-27
- Sheils, H. D.
- 1988 Sociology 370 Lecture, University of Wisconsin—LaCrosse, January 27.
- Spector, M. and J. I. Kitususe
- 1985 *Constructing Social Problems*. Menlo Park: Cummings Publishing Company.
- Straus, R.A.
- 1985 *Using Sociology. An Introduction From The Clinical Perspective*. Bayside, N.Y..